



**CABINET FOR HEALTH AND FAMILY SERVICES
DEPARTMENT FOR PUBLIC HEALTH
PUBLIC HEALTH PROTECTION & SAFETY
FOOD SAFETY BRANCH**

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What To Do About Food When You Lose Power

1. Protect refrigerated and frozen food

Do not open the refrigerator or freezer and instruct children not to open the door.

An unopened refrigerator will keep food safely cold for about four hours. A full freezer will hold the temperature for approximately 48 hours or 24 hours if it is half full.

If the freezer is not full, quickly group packages and poultry items from other foods. If the raw meat and poultry begin to thaw this will prevent their juices from getting onto other foods.

If it looks like the power outage will last more than 2-4 hours, pack refrigerated food items such as milk, dairy products, meat, eggs and leftovers into a cooler surrounded by ice. **Try to obtain block or dry ice to keep your food as cold as possible.** If it looks like the power outage will last several days, 50 pound of dry ice should hold an 18-cubic foot full freezer for two days. Plan ahead and know where you can buy block ice or dry ice.

Caution: Be careful when handling dry ice. **Never** touch dry ice with bare hands or breathe its vapors in an enclosed area. Dry ice is frozen carbon dioxide, a gas.

2. Be prepared with necessary equipment and supplies

- **Coolers:** One or more coolers. Styrofoam coolers can do an excellent job as well.
- **Ice:** Placing ice around food in a cooler will ensure that it will stay cold.
- **Thermometer:** A digital, dial or instant-read food or appliance thermometer tell you if the food is at a safe temperature. Keep appliance thermometers in the refrigerator and freezer no matter how long the power has been out. The refrigerator temperature should be 41 degrees F or colder. The freezer should be 0 degrees F or colder. If you are not sure a particular food is cold enough, take its temperature with a food thermometer.

3. When power is restored

When you have power again and the refrigerator and/or freezer is operating, follow these guidelines to decide what to do with food:

- Refrigerated foods should be safe as long as power is out no more than four hours.
- **Throw out any perishable food in your refrigerator, such as meat, poultry, lunchmeats, fish, dairy products, eggs and prepared or cooked foods that have been at 42 degrees F or warmer for two hours or more. Bacteria can multiply to unsafe levels under these conditions.**



- Fresh fruits and vegetables are safe as long as they are still firm and there is no evidence of mold or sliminess.
- If an appliance thermometer was kept in the freezer, read the temperature when power comes back on. If the appliance thermometer stored in the freezer reads 41 degrees F or colder, the food is safe and may be refrozen.
- If a thermometer has not been kept in the freezer, check each package of food to determine the safety.
- If the food still contains ice crystals or is 41 degrees F or colder, it is safe to refreeze.
- Raw meat including poultry, cheese, juices, breads and pastries can be refrozen without losing too much food quality.
- Prepared foods, fish, vegetables and fruits in the freezer, can be refrozen safely, but food quality may suffer.
- Remember, you cannot rely on appearance or odor of the food to determine if it is safe. Food that has thawed or reached temperatures warmer than 41 degrees F for more than two hours should be thrown out because bacteria may multiply to unsafe levels.
- To remove spills and freshen the freezer and refrigerator by washing thoroughly with a solution of two tablespoons baking soda dissolved in one quart of warm water.
- To absorb any lingering odors, place an open box or dish of baking soda in the appliance.

Questions and Answers

Q. What if I go to bed and the power is still not on?

- A. Before going to bed, pack perishables in coolers if you have not already done so and add as much ice as you can. When you go to bed, leave a bedroom light switched on. When the power goes back on, it will wake you and you can check the condition of your foods in the refrigerator and freezer.

Q. What if the power goes out while I'm away from my house and it is more than a few hours before I get home?

- A. Try to determine how long the power has been out. Check the internal temperature of food in your refrigerator with a thermometer. Liquids such as milk or juice are easy to check. Spot-check other items like steak or leftovers and if internal temperature 42 degrees F or warmer, throw it out. If the food in the freezer is colder than 41 degrees F and ice crystals still are present, you can usually refreeze.

Q. What if the power goes out and comes back while I am out?

- A. If your freezer is fairly full and you know power was out fewer than 24 hours, the food should be OK. There will be loss of quality with refreezing, but the food will be safe. If the refrigerator was out 2-4 hours or more, you should check the temperature and condition of perishable food to determine if food has been warmer than 41 degrees F.

Use this chart to determine what should be thrown away and what can be kept

Refrigerator Foods	Food held at 42 degrees F or warmer for more than two hours
Dairy, Eggs, Cheese	
Milk, cream, sour cream, buttermilk, evaporated milk, yogurt	Throw away
Butter, margarine	Keep
Baby formula, opened	Throw away
Fresh eggs, hard-cooked in shell, egg dishes, egg products, custards, puddings	Throw away
Hard cheeses: Cheddar, Colby, Swiss, parmesan, provolone, Romano	Keep
Soft cheeses: blue/bleu, Roquefort, Brie, Camembert, cottage, cream, Edam, Monterey Jack, ricotta, mozzarella, Muenster	Throw away
Processed cheeses	Keep
Shredded cheeses, low-fat cheeses	Throw away
Grated Parmesan, Romano, or combination (in can or jar)	Keep
Fruits and Vegetables	
Fresh fruits, cut	Throw away
Fresh fruits; not cut, fruit juices; opened, canned fruits; opened, coconut, raisins, dried fruits, candied fruits, dates	Keep
Vegetables; raw	Keep
Fresh mushrooms, herbs, spices	Keep
Vegetables; cooked, vegetable juice; opened, greens; pre-cut, pre-washed, packaged	Throw away
Baked potatoes, potato salad, commercial garlic in oil or butter	Throw away
Meat, Poultry, Seafood	
Fresh or leftover meat, poultry, fish, or seafood, thawing meat or poultry	Throw away
Lunchmeats, hotdogs, bacon, sausage, dried beef	Throw away
Canned meats; opened	Throw away
Canned hams (labeled "Keep Refrigerated")	Throw away
Mixed Dishes, Side Dishes	
Casseroles, soups, stews, pizza with any topping	Throw away
Meat, tuna, shrimp, chicken, egg salad	Throw away
Fresh pasta, cooked pasta, spaghetti, pasta salads with mayonnaise or vinegar base	Throw away
Gravy, stuffing	Throw away
Breads, Cakes, Cookie, Pastries, Pies	
Bread, rolls, cakes, muffins, quick breads, Cream or cheese filled pastries and pies	Keep
Breakfast foods—waffles, pancakes, bagels	Keep
Refrigerator biscuits, rolls, cookie dough	Throw away
Pastries; cream filled, Pies—custard, cheese filled, or chiffon, cheesecake	Throw away
Pastries, pies; fruit filled	Keep
Sauces, Spreads, Jams	
Opened mayonnaise, tartar sauce, horseradish	Throw away if at 50 degrees F for more than eight hours
Peanut butter, jelly, relish, taco, barbecue and soy sauce; mustard; catsup; olives, opened vinegar-based dressings	Keep
Worcestershire sauce, fish sauces, oyster sauces, Hoisin sauces, opened spaghetti sauce; opened creamy based dressings	Throw away

Frozen Foods	Still contains ice crystals and feels as cold as if refrigerated, food at 41 degrees F or colder	Food thawed, food held at 42 degrees F or warmer for more than two hours
Meat and Mixed Dishes		
Beef, veal, lamb, pork, ground meats, poultry, ground poultry	Refreeze	Throw away
Variety meats (liver, kidney, heart, chitterlings)	Refreeze	Throw away
Casseroles, stews, soups	Refreeze	Throw away
Fish, shellfish, breaded seafood products	Refreeze, may be some texture and flavor loss	Throw away
Dairy, Eggs, Cheese		
Milk	Refreeze, may be lose some texture	Throw away
Eggs (out of shell), egg products	Refreeze	Throw away
Ice cream, frozen yogurt	Throw away	Throw away
Cheese (soft and semi soft), cream cheese, ricotta	Refreeze, may lose some texture	Throw away
Hard cheese (cheddar, Swiss, parmesan)	Refreeze	Refreeze
Shredded cheeses	Refreeze	Throw away
Casseroles containing milk, cream, eggs, soft cheeses	Refreeze	Throw away
Cheesecake	Refreeze	Throw away
Fruits and Vegetables		
Fruit Juices	Refreeze	Refreeze, throw away if moldy, yeasty smell or sliminess develops
Home or commercially packaged fruit	Refreeze, will change texture and flavor	Refreeze, throw away if moldy, yeasty smell or sliminess develops
Vegetable Juices	Refreeze	Throw away after held at 40 degrees F or warmer for 6 hrs.
Home or commercially packaged or blanched vegetables	Refreeze, will change texture and flavor	Throw away after held at 40 degrees F or warmer for 6 hrs.
Breads, Pastries, Baking Ingredients		
Breads, rolls, muffins, cakes (without custard filling)	Refreeze	Refreeze
Pie crusts, commercial and homemade bread dough	Refreeze, some loss of quality	Refreeze, some loss of quality
Cakes, pies, pastries with custards or cheese filling	Refreeze	Throw away
Other		
Casseroles—pasta, rice based	Refreeze	Throw away
Flour, cornmeal, nuts	Refreeze	Refreeze
Breakfast items—waffles, pancakes, bagels	Refreeze	Refreeze
Frozen meal, entrée, specialty items (pizza, sausage and biscuit, meat pie, convenience foods)	Refreeze	Throw away